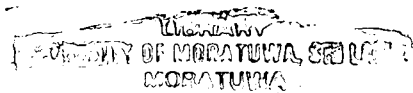


# FRAMEWORK FOR POST EVALUATION OF IMPLEMENTATION OF ENTERPRISE SYSTEMS

By

Chandrakanth Jayasinghe



The Dissertation was submitted to the Department of Computer Science and Engineering of the University of Moratuwa in partial fulfillment of the requirement for the Degree of Master in Business Administration

681.3"04"  
358.004

Department of Computer Science and Engineering  
University of Moratuwa

December 2004

University of Moratuwa



82715

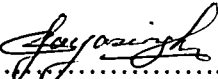
Thesis

82715

82715

## DECLARATION

"I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any University to the best of my knowledge and belief it does not contain any material previously published, written or orally communicated by another person or myself except where due reference is made in the text."

  
.....  
(Signature of the Candidate)

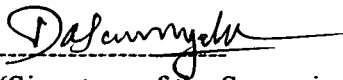
C. Jayasinghe

Date 2/2/2005

To the best of my knowledge, the above particulars are correct.



University of Moratuwa, Sri Lanka.  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)

  
.....  
(Signature of the Supervisor)  
Dr. Sarath Dassanayake  
Department of Management of Technology  
University of Moratuwa  
Sri Lanka

.....  
(Signature of the Co-Supervisor)

Mr. Kithsiri Samarasinghe  
Department of Management of Technology  
University of Moratuwa  
Sri Lanka

## ABSTRACT

A range of influences, both technical and organizational, has encouraged the wide spread adoption of Enterprise Systems (ES). The decision to implement an Enterprise System is a strategic one. ES will have major impact in every area of the organization ranging from front office customer care functions to back office strategic planning and decision making. Nevertheless, there is a growing consensus that Enterprise Systems have in many cases failed to provide expected benefits.

The increasing role of, and dependency on ES (and IT in general), and the 'uncertainty' of these large investments, have created a strong need to monitor and measure ES performance.

This paper reports on a research project aimed at deriving a 'Framework for post evaluation of implementation of Enterprise Systems'. The research seeks to identify a holistic approach to Enterprise Systems evaluation by identifying different perspectives and factors.

The conceptual framework identifies five perspectives where post evaluation of implementation should be focused, namely, Business vision, product perspective, financial performance, user perspective and match of business process of the company.

Each perspective has several attributes that help to measure the performance of the system. The conceptual framework takes into consideration 22 attributes in evaluating the performance of an Enterprise system. Each attributes performance was captured in 3 dimensions. They are the level of performance expected by the users, performance of the previous system and the current system.

The framework proposed by this paper makes managers to bear in mind that ES post evaluation does not only refer to traditional quantitative ROI measures but should include new dimensions such as strategic, user expectations, product attributes, business process and productivity.

The paper unfolds that the performance of a system is a subjective judgment depends on the users expectation level on each attribute. The level of expectation one user (group) to another differs and the perception of the ES performance highly depends on the ability of the system to satisfy this expectation level of each user.

Identifying the expectation level of each user on each attribute helps to identify what they value most and hence helps to identify the areas of the system that have not met the expectation level of the users and areas where the system is failing.

## ACKNOWLEDGEMENT

Firstly, I wish to express my heartiest gratitude to my supervisors Dr. Sarath Dassanayake and Mr. Kithsiri Samarasinghe for providing me the necessary guidance and advise to carry out this research.

Secondly, I wish to express my gratitude to all the members in the staff of the Department of Management of Technology for the assistance they rendered to me.

Thirdly, I wish to thank the Librarian and the library staff for providing me all the material as and when they were required to carryout this research.

My final gratitude goes to my parents and my wife for all the guidance and encouragement given to make this course a complete success.



University of Moratuwa, Sri Lanka  
Electronic Theses & Dissertations  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)

# CONTENTS

Acknowledgement

Abstract

Contents

1.0 Chapter One - Introduction	1
1.1 Background of the Study	2
1.2 Purpose of the Study	5
1.3 Objectives of the Study	6
1.4 The Significance of the Study	7
1.5 Methodology of Study	7
1.6 Limitation of the Study	8
1.7 Chapter Framework	9
2.0 Chapter Two - Literature Review	10
2.1 Introduction	11
2.2 What is ES?	11
2.3 ES Vendors	11
2.4 Enterprise Resource Planning Classification	13
2.5 How do enterprise system create value to the business?	14
2.6 ES Success and Failure	16
2.7 Need an ES Post Evaluation	19
2.8 Benefit from post evaluation of Performance	21
2.9 ES never ending journey	21
3.0 ChapterThree - Conceptual Framework	22
3.1 Introduction	23
3.2 Conceptual Framework	24
3.3 Core Elements of the Framework	25
3.4 Research Method	29
3.5 Organization of Concept and Attributes	30
4.0 Chapter Four - Results and Findings	31
4.1 Introduction	32
4.2 Sample Profile	32
4.3 Usage of Different Modules	32
4.4 Es Implementation project objectives	33
4.5 Responsibility of Post Evaluation of IT Investments	33
4.6 Current Post Evaluation Methods	34
4.7 The Success and Failure of ES Implementations	35
4.8 Analysis of User Profiles	36
4.9 Overall Analysis of the Attributes of the Conceptual Model	39
4.10 User profile wise analysis of the attributes of the conceptual model	43
5.0 Chapter Five - Conclusion	55
Appendix I - Survey Questionnaire	58
Appendix II - Tables	62
Appendix III - Graphs	71
Appendix IV - Bibliography	86
Appendix V - Datasheet	88

